



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/586,636

09/11/2006

Juichi Ino

2006_0912A

6051

513 7590 01/03/2008
WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

PARVINI, PEGAH

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

01/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/586,636

Applicant(s)

INO ET AL.

Examiner

Pegah Parvini

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

1. Claims 1-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,508,876 to Bernhardt et al.
2. Regarding claims 1-2, and 4-6, Bernhardt et al. teach a pigment having a platelet-shaped layer as substrate, at least one coating of at least one metal oxide layer and at least two layers comprising or consisting of colorants (column 1, lines 64-67; Figure 4). The reference discloses that the substrate (platelet-shaped) may be glass flakes (column 2, lines 59-60) and that pigment particles, of both type of organic and inorganic, are considered as the colorants (column 3, lines 4-6, 12-44) wherein the pigment particles are dispersed into the layer of the metal oxide which can be silica (column 3, lines 45-47; column 4, lines 32-38).

In addition, the reference discloses at least one coating of at least one metal oxide on the platelet-shaped substrate such as glass flakes, and that titanium dioxide, zirconium oxide, and silica as the metal oxide layer (column 4, lines 17-26; column 6, lines 35-37); since the reference discloses the possibility of dispersing organic pigment particles in metal oxide layer (which an example of it could be silica), it would have been

obvious to have coating titanium dioxide or zirconium oxide on the substrate over which a layer of silica in which organic pigments are dispersed is formed.

In other words, Bernhardt et al. disclose different embodiments in which the claimed invention can be found in certain embodiments of the references; thus, it would have been obvious to utilize Bernhardt et al. to obtain the invention as claimed.

3. Regarding claim 3, Bernhardt et al. disclose that the organic or inorganic pigment particles have an average particle size of from 10 to 40 nm (column 4, lines 32-35).

Furthermore, the reference discloses that the particle size of the pigments must be adapted to the desired layer thickness of the substrate (column 3, lines 1-4).

4. Regarding claim 7, Bernhardt et al., in one of their embodiments, disclose coating the platelet-shaped substrate of glass flakes with titanium dioxide or zirconium oxide over which silica containing organic pigment is coated (column 1, lines 64-67; column 2, lines 59-60; column 4, lines 17-26; column 6, lines 35-37).

5. Regarding claims 8, and 10-11, Bernhardt et al. disclose the use of said pigment as described in details above, in cosmetics, printing inks, glazes for ceramics and glasses, and pigmenting paints (column 2, lines 13-15).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernhardt et al. as applied to claim 1 above, and further in view of US Patent Application Publication No. 2005/0107512 to Fukuchi et al.

7. Regarding claim 9, Bernhardt et al. disclose a platelet-shaped substrate of glass flake coated with at least one coating of at least one metal oxide layer and at least two layers comprising or consisting of colorants wherein the colorants are the pigment particles (of both types of organic and inorganic).

Even though the reference discloses the use of said pigment in different fields of work as well as for pigmenting paints, it does not expressly disclose the use of it in a resin composition.

Fukuchi et al. disclose a resin composition containing at least one material selected from the group consisting of glass flakes with at least one selected material with at least one selected from the group consisting of a metal and a metal oxide (Abstract; [0012]). The example of metal oxide may be silicon oxide ([0025]-[0027]). The resin exhibits a high glitter through reflected light ([0037]).

Therefore, at the time of the invention, it would have been obvious to modify Bernhardt et al. in order to include the use of the pigment in resin compositions as that taught by Fukuchi et al. motivated by the fact that this resin composition exhibits a high glitter through reflected light ([0037]).

Response to Amendment

8. Applicants' amendments to claim 1, filed October 224, 2007, page 3, are acknowledged. However, the amendments are not sufficient to place the claims in condition for allowance; they, also, do not overcome the rejection of said claims as set forth in the previous Office Action.

9. Applicants' amendments to claims 2 and 3, filed October 2007, page 3, by specifying what "the pigment" was referring to, are acknowledged. As such the rejection under 35 U.S.C. 112- second paragraph as generally set forth in the previous Office Action is hereby withdrawn.

10. Applicants' amendment to Specification, filed October 24, 2007, page 2, is acknowledged. However the amendment does not place the application in condition for allowance.

Response to Arguments

11. Applicant's arguments filed October 24, 2007 have been fully considered but they are not persuasive. However, a new ground of rejection has been presented above in view of the amended claims.

12. Applicants have argued that Marshall does not teach a pigment in the silica layer coating the glass flake substrate.

The Examiner, respectfully, submits that claim 1, as also clearly pointed out in the previous Office Action (page 3, paragraph 5), recites the limitation of “optionally” having a coating layer on the glass flake substrate. In addition, the substrate is coated with silver and silica.

Furthermore, as well settled in the art, silver is considered an inorganic pigment.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Application/Control Number:
10/586,636
Art Unit: 1793

Page 7

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pegah Parvini whose telephone number is 571-272-2639. The examiner can normally be reached on Monday to Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PP



J. A. LORENGO
SUPERVISORY PATENT EXAMINER